Children's Hospital of Philadelphia
PolicyLab

Opioid Use During Pregnancy and its Connection to Maternal Mental Health

Family & Community Health

Date Posted:

Jun 19, 2018

In the midst of the opioid crisis, the health impacts of prenatal opioid exposure have garnered important policy attention at every level. As we strive to examine all angles of the epidemic, policymakers and researchers are catching up to the clinical best practice of considering the infant and mother as an inseparable pair. While this approach can be challenging in research—because linking health data between mothers and infants is complex, time-consuming and often imperfect—it is imperative that we continue to use innovative methods to study the mother and infant as a unit.

In this vein, there are a number of unanswered questions regarding the supports mothers need in the transition to pregnancy and motherhood. For example, there is still a lot that is unknown about the mental health status of women taking or using opioids during pregnancy, regardless of the source of those opioids (i.e., prescribed as part of treatment for an opioid use disorder, used licitly or illicitly to manage chronic pain and/or as the manifestation of an opioid use disorder). Among infants born to women with prenatal opioid use, it's important to recognize that a significant proportion of them will not go on to have clinical symptoms of withdrawal after birth (known as Neonatal Abstinence Syndrome [NAS], or Neonatal Opioid Withdrawal Syndrome [NOWS]). Rather, hospitals will discharge these infants just a couple of days after birth, barring any other complications.

In contrast, infants with NAS often stay in the hospital for weeks while their withdrawal symptoms are treated, with an average stay of 19 days. This lengthy hospitalization for the infant is a unique opportunity for the care team to recognize and address any maternal mental health conditions through wrap-around services, trauma-informed care and an inter-disciplinary approach. **Therefore, for the mothers who were affected by opioids in pregnancy but whose infants did *not* develop NAS, we wanted to know if we were overlooking and therefore failing to address mental health conditions when we send these families out the door just a few days after birth**.

To answer this question, we conducted a study to describe the prevalence of four mental health conditions (depression, anxiety, bipolar disorder and schizophrenia) in a unique dataset of young mothers linked to their infants across health care billing claims and birth certificates. We then compared the prevalence of these mental health conditions among three groups: mothers of infants with NAS, mothers of infants with prenatal opioid exposure but without NAS and mothers without prenatal opioid exposure (controls).

What we found was striking but not surprising. Almost one in four mothers of infants, both with NAS and with opioid exposure without a diagnosis of NAS, had a diagnosis of depression. Mothers of infants with opioid exposure prenatally but without a diagnosis of NAS had twice the risk of bipolar disorder and nearly *five times* the risk of schizophrenia as the control group. Even with these risks, hospitals were discharging these families just two to four days after birth, which is the standard length of stay for uncomplicated vaginal and Cesarean births, respectively.

In short, **mothers of infants with exposure to opioids prenatally but who did not develop NAS are at similarly high risk for mental health conditions as mothers of infants with NAS, and both are at higher risk than the control group.** What this means is that we may be missing many instances of unaddressed maternal substance use and mental health conditions during the very short birth hospitalization of infants who

do not receive an NAS diagnosis. This may have long-term implications for the mother-infant dyad. Mothers who used opioids during pregnancy but whose infants were fortunate not to develop withdrawal need support too, including mental health resources and social services. The birth hospitalization is just one of many chances to screen and intervene—but the optimal time to identify the mental health conditions these women are facing is likely well before they even go to the hospital to give birth.

Fortunately, with the recent United States Preventive Services Task Force's recommendation to screen all women in pregnancy for perinatal depression, and the growing calls for early universal screening for opioid use and opioid use disorder in the prenatal period, there is increasing recognition that addressing maternal mental health and substance use disorders should begin as early as possible in the pregnancy (ideally before!). However, we also need practical strategies to ensure that relevant information about needed or ongoing maternal and family-level supports is consistently and reliably included in the infant's medical record. The brief postpartum depression screening that pediatricians perform at early newborn visits is a great example of providing intergenerational care rather than solely focusing on the infant. These strategies are a just a few that can help these mothers and infants reach their full potential by ensuring that maternal mental health conditions and substance use are identified and addressed early, as part of holistic care for the mother and infant across the perinatal continuum.

Laura Faherty, MD, MPH, MS, was a Robert Wood Johnson Foundation Clinical Scholar who worked with PolicyLab and the Center for Pediatric and Perinatal Disparities, both at Children's Hospital of Philadelphia. She is now a physician policy researcher at the RAND Corporation. Her research interests include understanding and intervening upon the barriers to care for underserved, stigmatized and vulnerable populations.

Laura Faherty, MD, MPH, MS
